



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/065,576

10/31/2002

Jeffrey Thomas Remillard

202-1293

9752

22844

7590

06/17/2004

FORD GLOBAL TECHNOLOGIES, LLC.
SUITE 600 - PARKLANE TOWERS EAST
ONE PARKLANE BLVD.
DEARBORN, MI 48126

EXAMINER

TSAI, CAROL S W

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,576

Applicant(s)

REMILLARD ET AL.

Examiner

Carol S Tsai

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-18 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 5, 7, 9, 11, 13, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 5,485,155 to Hibino.

With respect to claims 1, 2, 5, 11, 13, and 17, Hibino discloses a system for detecting an object, comprising: a light source (a semiconductor laser diode 3 shown on Fig. 1) generating a light pulse, said light pulse being emitted (see col. 5, lines 29-32); a light detector (light receiving element 5 shown on Fig. 1) configured to receive a reflection of said pulse (see col. 5, lines 32-35); and, a controller (electronic control circuit (CPU) 9 shown on Fig. 1) operably connected to said light source and said detector, said controller configured to indicate a presence of the object from said received light pulse, said controller further configured to adjust sensitivity for detecting the object based on an elapsed time from said emission (see col. 2, line 61 to col. 3, line 50 and col. 5, line 38 to col. 6, line 14).

As to claims 7 and 9, Hibino also discloses a method for detecting an object, comprising:

Art Unit: 2857

emitting a light pulse (see col. 5, lines 29-32); receiving a reflection of said light pulse (see col. 5, lines 32-35); indicating a presence of the object from said received light pulse and, increasing sensitivity of said indicating step when said received light pulse is received at an elapsed time from said emission that is greater than a predetermined time (see col. 7, line 49 to col. 9, line 53).

As to claim 18, Hibino also discloses an article of manufacture, comprising: a computer storage medium (RAM (not shown)) having a computer program encoded therein (see col. 6, lines 15-24) for detecting an object (see col. 5, lines 21-27); code for inducing a light transmitter to emit a light pulse (see col. 5, lines 29-32); code for storing values indicative of a reflection of said light pulse (see col. 5, lines 32-35); code for indicating a presence of the object from said stored values and code for adjusting sensitivity for detecting the object based on elapsed time from said emission (see col. 2, line 61 to col. 3, line 50 and col. 5, line 38 to col. 6, line 14).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6, 8, 10, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hibino in view of U. S. Publication 2003/0222772 to Laufer.

With respect to claims 6, 8, 10, 12, and 14, Hibino discloses transmitting said light pulse to a light reflector and reflecting said light (see col. 5, lines 29-37).

Hibino does not disclose the reflector being a polymeric light reflector.

Art Unit: 2857

Laufer teaches the reflector being a polymeric light reflector (see paragraph 0009).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hibino's method to include the reflector being a polymeric light reflector, as taught by Laufer, in order to essentially isolate signals transmitted/received from environment lights, so as to minimize distortion of the signals (see Laufer, lines 3-6 of paragraph 0009).

6. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hibino in view of JP 05297141 to Azusazawa et al.

As noted above, with respect to claims 15 and 16, Hibino discloses the claimed invention, except for a near infrared diode laser/a near infrared light detector.

Azusazawa et al. teach a near infrared diode laser/a near infrared light detector (see Constitution, lines 1-8).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hibino's method to include a near infrared diode laser/a near infrared light detector, as taught by Azusazawa et al., in order that highly precise distance information by recognizing the image information obtained by a pick-up means, and emitting the reflected light of the light beam projected toward an object can be provided (see Azusazawa et al., Purpose, lines 2-4).

Art Unit: 2857

Allowable Subject Matter

7. Claims 3 and 4 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments with respect to claims 1, 2, and 5-18 have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol S. W. Tsai whose telephone number is (571) 272-2224. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax number for TC 2800 is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2800 receptionist whose telephone number is (571) 272-1585 or (571) 272-2800.

In order to reduce pendency and avoid potential delays, Group 2800 is encouraging FAXing of responses to Office actions directly into the Group at (703) 872-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the

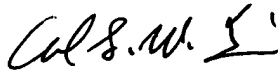
Application/Control Number: 10/065,576

Page 6

Art Unit: 2857

examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2800

will be promptly forwarded to the examiner.

A handwritten signature in black ink, appearing to read "Carol S. W. Tsai", with a stylized flourish at the end.

Carol S. W. Tsai

Patent Examiner

Art Unit 2857

06/11/04